

Hydrogen detectors developed by Nissha FIS, Inc. (hereinafter "FIS"), a group company of Nissha Co., Ltd. (hereinafter "Nissha"), have been selected for Daimler AG's (hereinafter "Daimler") Mercedes-Benz GLC F-CELL fuel cell vehicle. Daimler launched of the GLC F-CELL, the world's first plug-in fuel-cell/battery electric vehicle,* to the European market in November 2018.



Daimler's Mercedes-Benz GLC F-CELL

(Photo credit: Daimler)

FIS hydrogen detector

* Plug-in fuel-cell/battery electric vehicle: an electric vehicle which can obtain electrical power from either

hydrogen-powered fuel cells or lithium-ion batteries.

A hydrogen detector is a device designed to detect leaks of hydrogen gas, and is required to be installed in all fuel cell vehicles to detect hydrogen gas leaks in accordance with the UN-R134-00-S02 international standard on fuel cell vehicles. The Mercedes-Benz GLC F-CELL uses two hydrogen detectors, and in the event a hydrogen leak is detected, they will immediately issue an alert.

The FIS hydrogen detectors use coil-shaped sensing elements to solve the issue of how to make them both small yet with a maximal catalyst surface area, and achieve both rapid detection and long sensor life.

Demand for hydrogen detectors is expected to expand as fuel cell vehicles become more popular, as well as in areas such as household fuel cell systems and infrastructure such as hydrogen stations.

In addition to its core product of touch sensors, Nissha's Devices Business Unit is developing innovative gas sensors that can detect gases such as exhalation or toxic gases like carbon monoxide. Also it provides products for a wide range of markets like safety, the environment, health, and medical .

We address the demands and challenges of our customers and society, and through our business activities aim to realize the enrichment of people's lives.